

# MIH

## EV OPEN Platform

鴻海 CTO  
魏國章 William Wei

**MIH**

In 4 months

**>8000**



THE  
AUTOWARE  
FOUNDATION



arm

SIEMENS



QUALCOMM



SAI  
SUPERALLOY



SAMSUNG SDI

YAGEO



ASUS

CATL





≥8000







#1

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高效 × 執行力 × 硬體製造

**Softer Side of**  **FOXCONN**<sup>®</sup>  
鴻海科技集團





“ **Software is  
Eating the World** ”

|  
Marc Andreessen,  
August 20, 2011 in WSJ



“ **Software 2.0 is  
Eating Software 1.0** ”

—  
Andrej Karpathy,  
Feb, 2020 AI Expert at Tesla





**Power of  
SOFTWARE**













# 軟體定義 未來世界

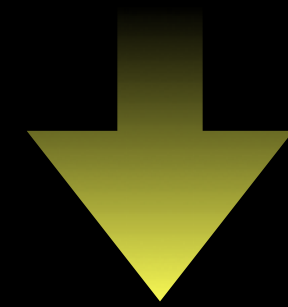


**Power of  
OPEN**



**Nokia**

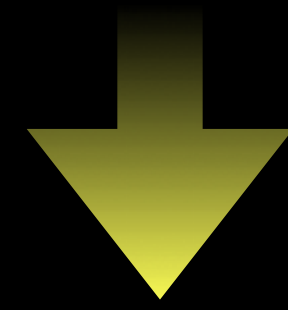
# Nokia



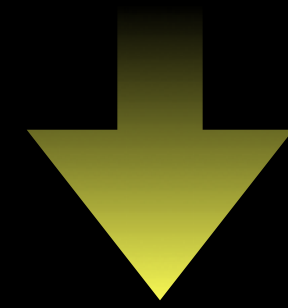
# iPhone



# Nokia



# iPhone



# Android

**Power of  
SOFTWARE  
E**

**Power of  
OPEN**



# EV開放平台

## MIH

軟體

開放

# 現今 汽車 產業痛點

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**硬體定義**

落地即貶值

**複雜架構**

管理難度高

**封閉系統**

難參與開發

# 鴻海解決方案

**硬體定義**

落地即貶值



**軟體定義**

升級即升值

**複雜架構**

管理難度高



**軟硬分離**

開發週期短

**封閉系統**

難參與開發



**開放生態**

集眾人智慧

**EV 開放平台**



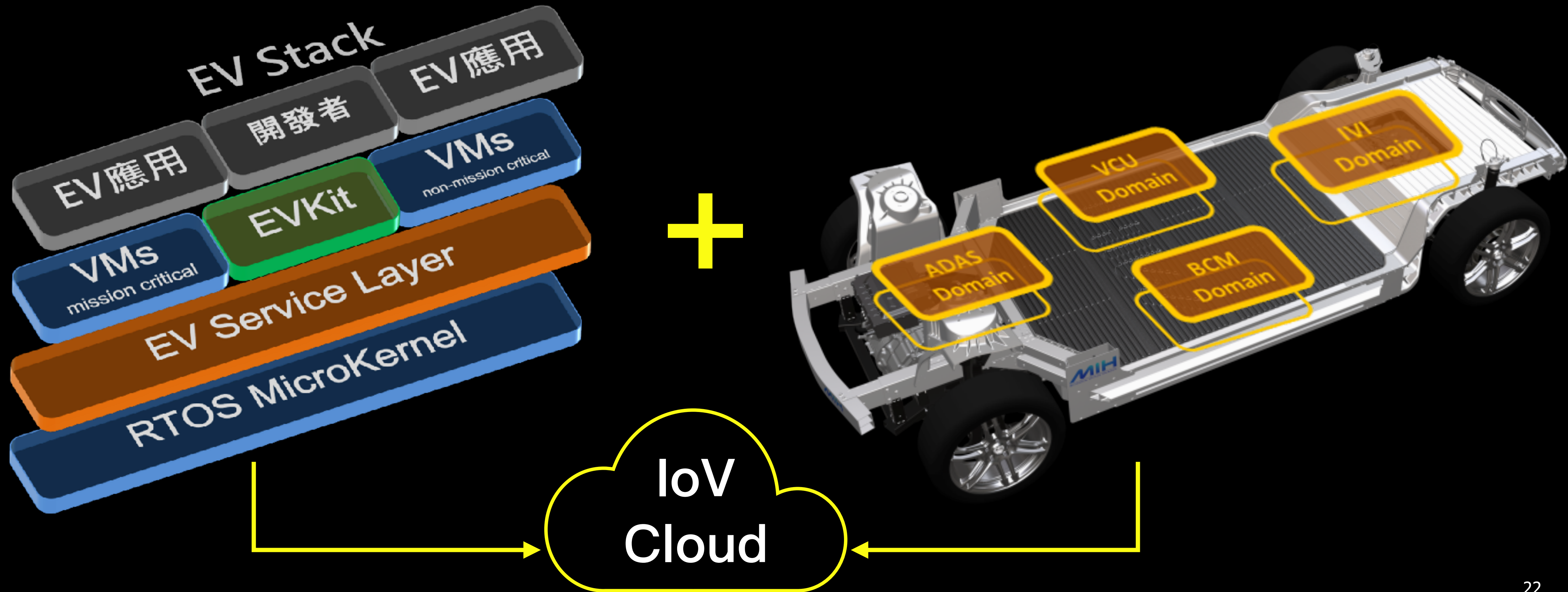
# 軟硬分離

軟體  
平台

+

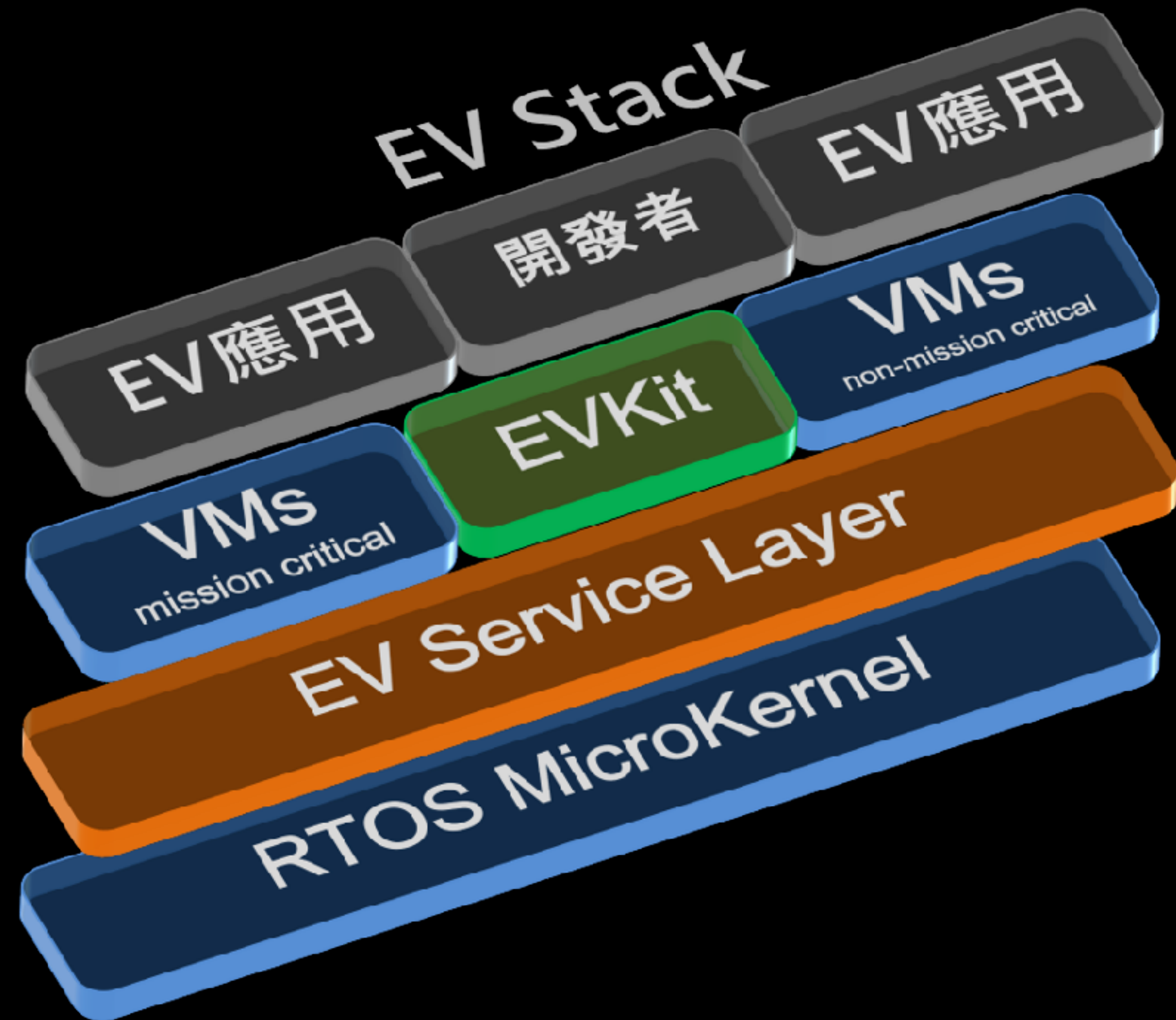
硬體  
平台

# EV開放平台



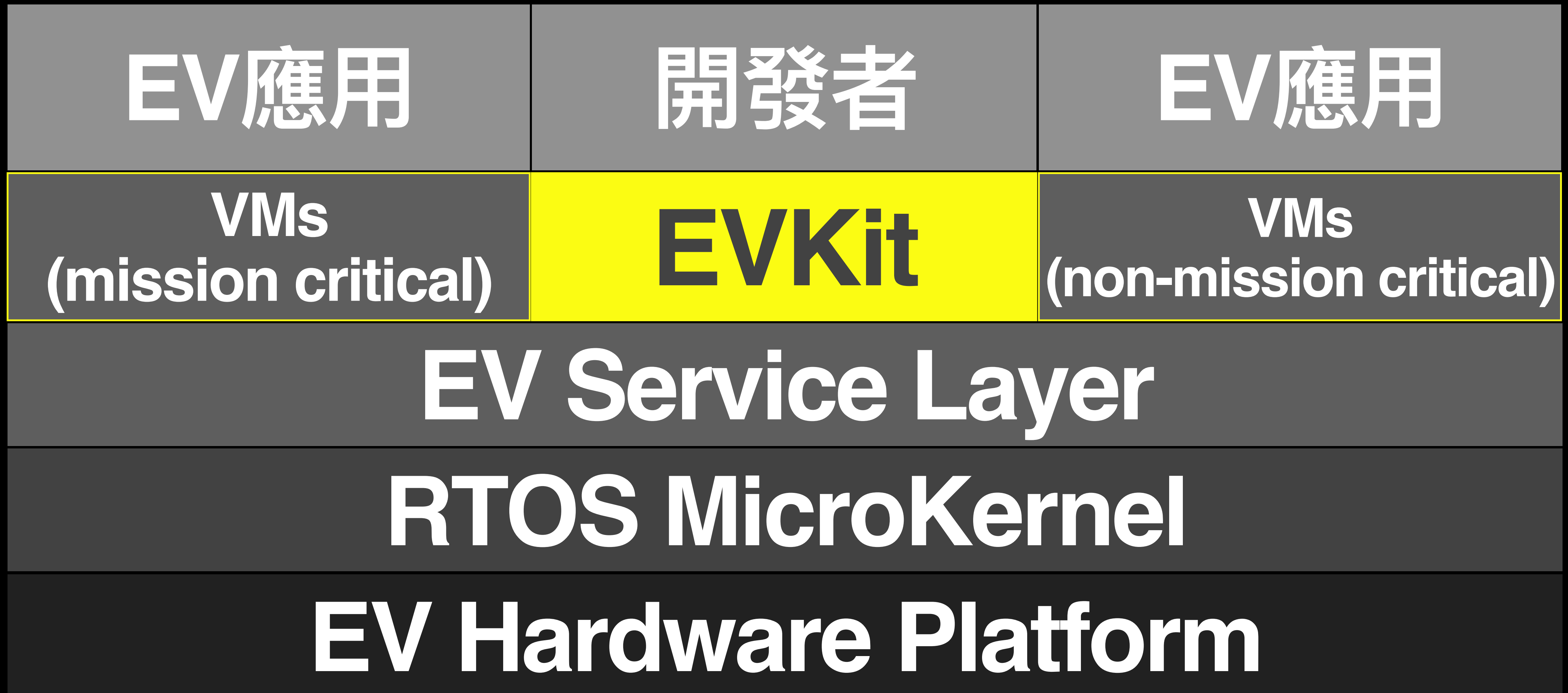


# 軟體平台





# EV Stack



# 開放生態

AUTOSAR,  
ADAS,  
OTA,  
VLM,  
Remote Key ...

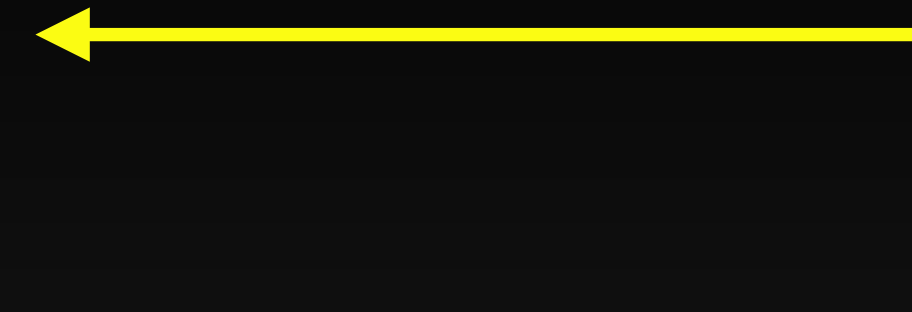
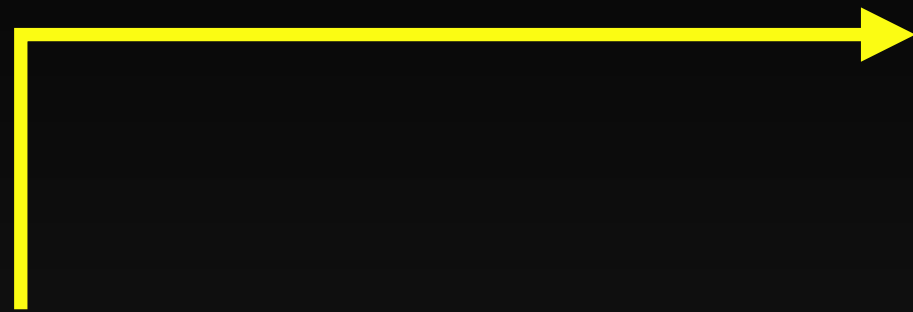
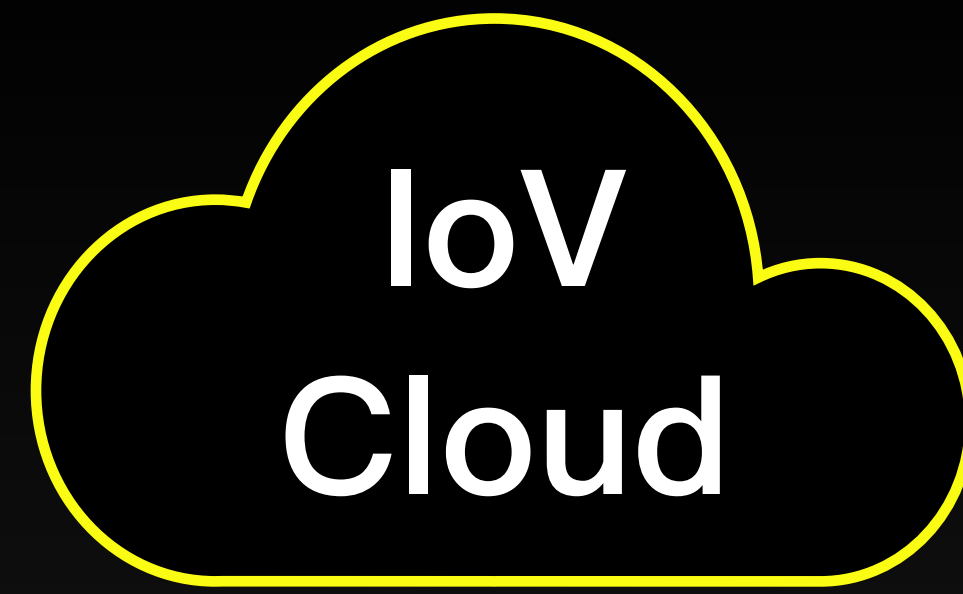
開發者

Open Cockpit,  
Open  
Infotainment,  
Alexa Auto,  
Android Auto,  
Apple CarPlay...

VMs  
(mission critical)

**EVKit**

VMs  
(non-mission critical)



**AUTOSAR,  
ADAS,  
OTA,  
VLM,  
Remote Key ...**

**開發者**

**Open Cockpit,  
Open  
Infotainment,  
Android Auto,  
Alexa Auto,  
Apple CarPlay...**

**VMs  
(mission critical)**

**EVKit**

**VMs  
(non-mission critical)**



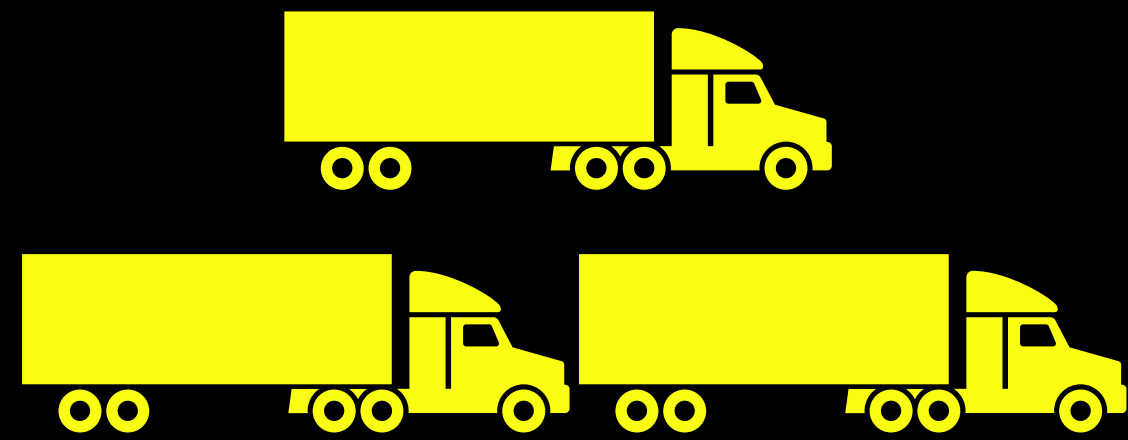
# 未來應用



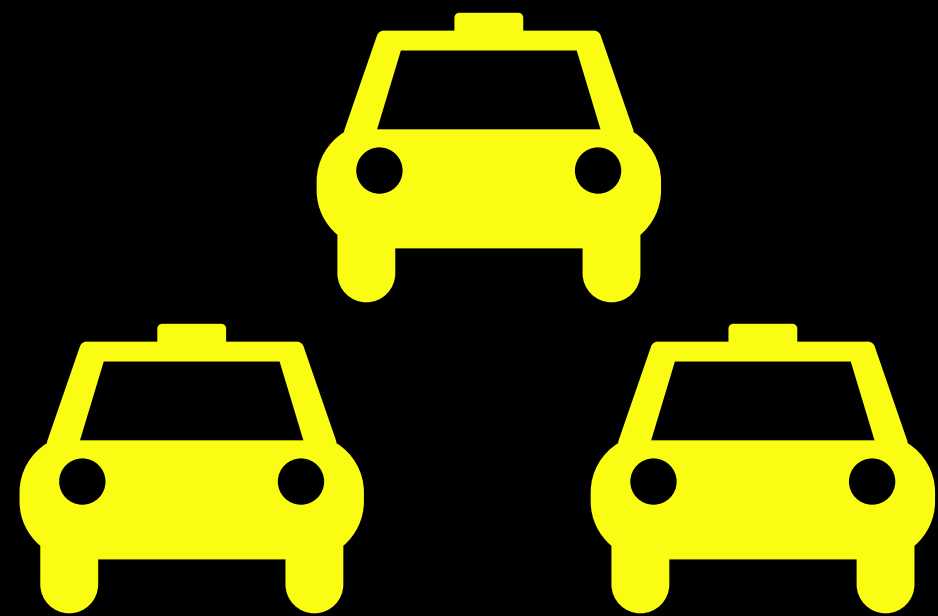
自動駕駛

支持多種自駕  
個人化模式

# 未來應用

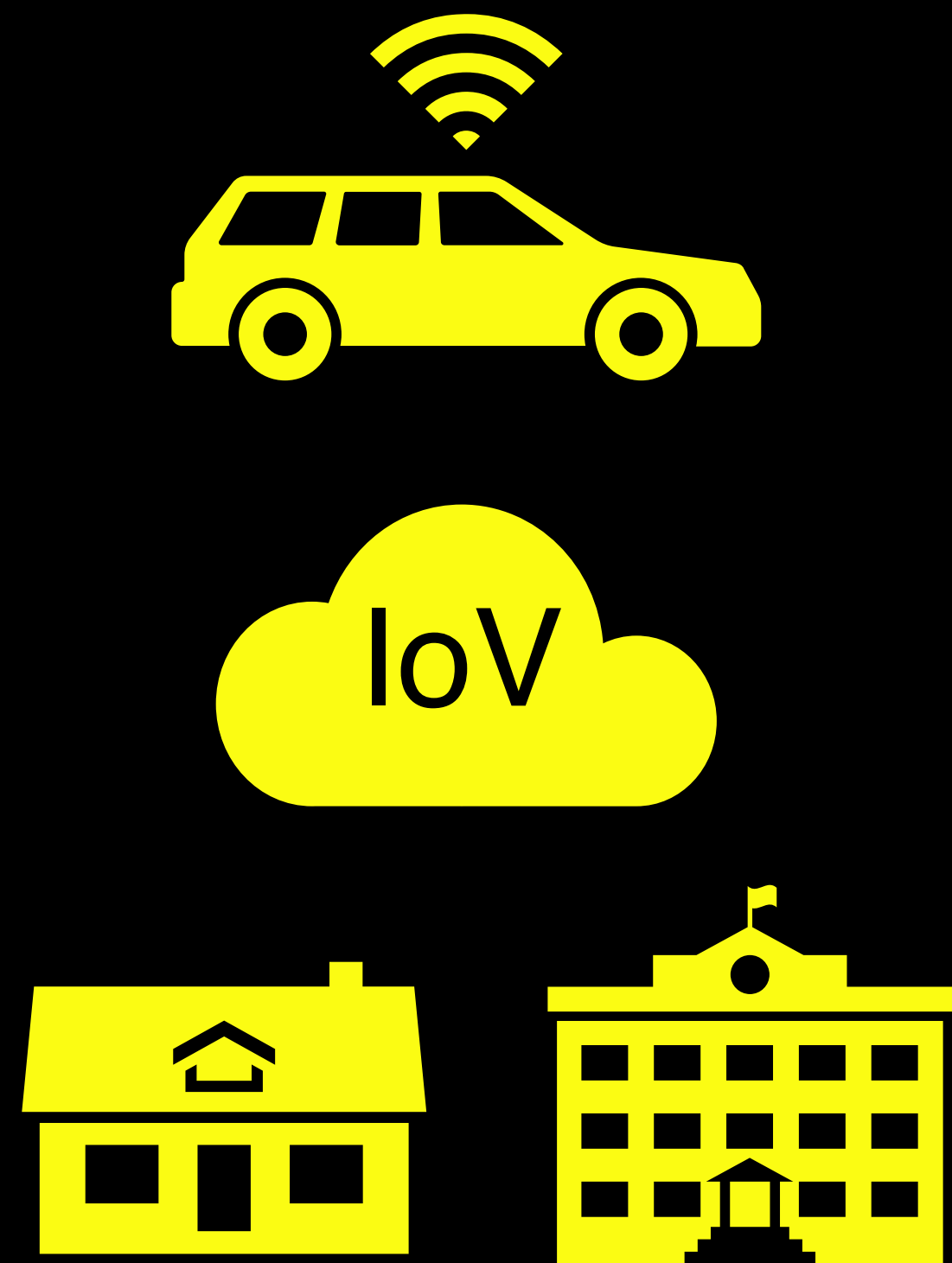


**Fleet Mgmt**



**Robotaxi**

# 未來應用

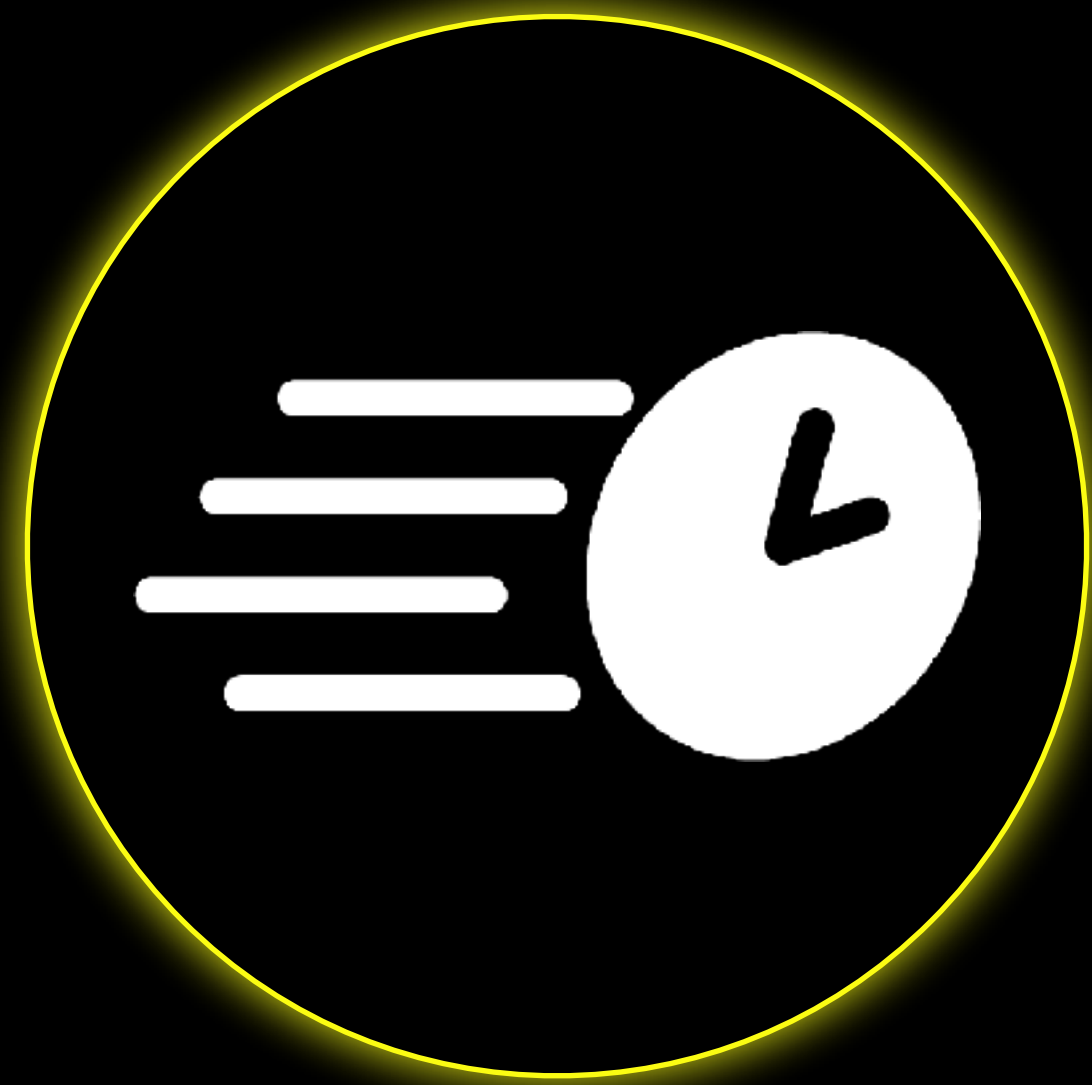


**Smart Mobility**  
+  
**Smart Home Office**



# Mission Critical

# Mission Critical



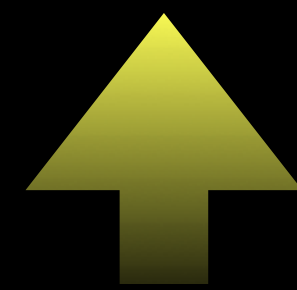
**即時性**  
(Real Time)



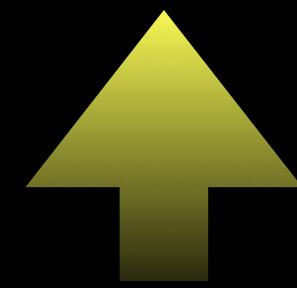
**安全性**  
(Security & Safety)



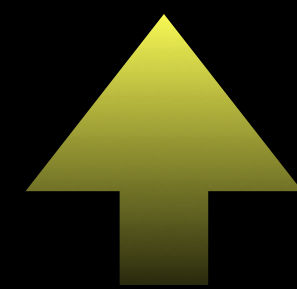
**即時性**  
(Real Time)



RTOS edge devices



5G/6G



To-The-Edge CDN 雲端

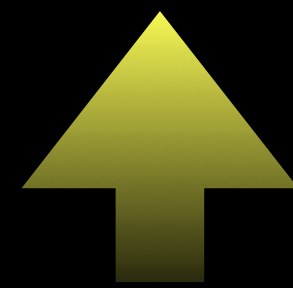




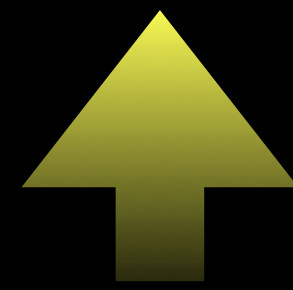
**安全性**

**(Security & Safety)**

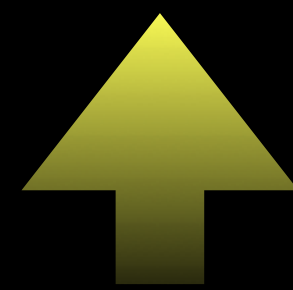
# Safety



Drive by wire / Sensor fusion



Best-in-Class Autonomous



ISO26262 / ASIL D

# Key Disrupt

Power of  
Software & OPEN

↗ 有生命的汽車

↘ 開發週期

↘ 進入門檻

**One More Thing ...**



## Tweet



**Paul Graham**  @paulg · May 18, 2017

The Tesla Model S was like the iPhone in that all other manufacturers now have to copy it. The difference is many don't realize that yet.



29



396



812



## Replies



**Paul Graham**  @paulg · May 18, 2017

Replying to @paulg

There's no analog to Android in this situation. That gives Tesla an advantage that Apple didn't have.



12



28



120





**“Tesla: iPhone of EV”**

**“Who ? : Android of EV”**

**“MIH: OPEN Platform of EV”**

加速走向開放的產業生態

**MIH: EV OPEN Platform**

**Empowering  
OPEN partnership**





# New CyberSecurity Challenges

# IoV

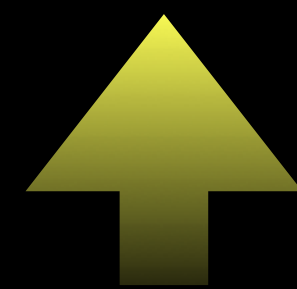




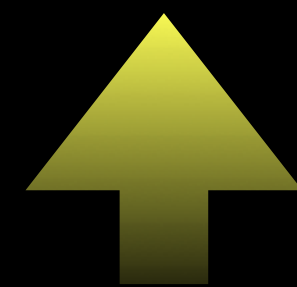
**安全性**

**Security & Safety**

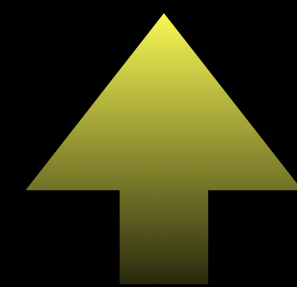
# Cyber Security



Edge-to-Edge / Edge-to-Cloud



Vehicle Lifecycle Management



End-to-End encryption

# Connected Vehicle



**Cyber  
Security**

↑ In Vehicle (EEA & more)

↑ To Public Cloud (Internet)

↑ To Private Cloud (Intranet)

↑ Peer to Peer (D2D/V2V)

**Let's get down to  
the business**

**Thank you!**